

WHAT IS CLAIMED IS:

1 1. A method of identifying complex text comprising:
2 if a presentation data stream contains a complex text string, inserting before
3 said complex text string a preselected control in the presentation data stream, wherein
4 the preselected control corresponds to a plurality of parameters for controlling
5 processing of complex text, each parameter represented by a corresponding value in
6 the preselected control, a first parameter having a value indicating a control type for
7 controlling processing of complex text, a second parameter taking one or more values
8 for enabling and disabling the processing of complex text.

1 2. The method of claim 1 wherein the one or more values for enabling
2 and disabling the processing of complex text comprise a set of values for enabling
3 and disabling a first type of processing of complex text.

1 3. The method of claim 2 wherein the first type of processing of complex
2 text comprises bidirectional (*bidi*) processing.

1 4. The method of claim 2 wherein the plurality of parameters further
2 includes a third parameter, wherein the third parameter takes one or more values for
3 enabling and disabling a second type of processing of complex text.

1 5. The method of claim 4 wherein the second type of processing of
2 complex text comprises glyph processing.

1 6. The method of claim 1 wherein the plurality of parameters further
2 includes a third parameter, the third parameter taking a value comprising an alternate
3 text position.

1 7. A method for processing complex text comprising:
2 responsive to a first predetermined type of control in a presentation data
3 stream, wherein the first predetermined type of control includes a first parameter
4 represented by a corresponding value in the first predetermined type of control for
5 controlling a first type of complex text processing:

6 determining if a first type of complex text processing is enabled;
7 applying the first type of complex text processing to a complex text
8 string succeeding said first predetermined type of control in the presentation data
9 stream, if the first type of complex text processing is enabled.

1 8. The method of claim 7 wherein the first type of complex text
2 processing comprises bidirectional (*bidi*) processing.

1 9. The method of claim 8 wherein the first parameter takes one or more
2 values for enabling and disabling the processing of complex text, and wherein the one
3 or more values for enabling and disabling the processing of complex text includes one
4 or more values for determining a paragraph direction for the bidirectional processing
5 of the complex text.

1 10. The method of claim 7 wherein the first predetermined type of control
2 includes a second parameter represented by a corresponding value in the
3 predetermined type of control for controlling a second type of complex text
4 processing, the method further comprising:

5 determining if a second type of complex text processing is enabled;

6 applying the second type of complex text processing to the complex
7 text string succeeding said first predetermined type of control in the presentation data
8 stream, if the second type of complex text processing is enabled.

1 11. The method of claim 10 wherein the second type of complex text
2 processing comprises glyph processing.

12. The method of claim 7 further comprising:

2 responsive to a second predetermined type of control in the presentation data
3 stream, the second predetermined type of control including a parameter represented
4 by a corresponding value in the second predetermined type of control operable for
5 disabling the first type of complex text processing:

6 determining if the first type of complex text processing is disabled; and

7 if the first type of complex text processing is disabled, overriding said step of
8 applying the first type of complex text processing to the complex text string.

1 13. The method of claim 7 wherein the first predetermined type of control
2 includes a second parameter represented by a corresponding value in the first
3 predetermined type of control for determining an alternate text position, the method
4 including setting a text position using said alternate text position if the first type of
5 complex text processing is enabled.

1 14. A machine readable computer program product including
2 programming for identifying complex text comprising programming instructions for:

3 if a presentation data stream contains a complex text string, inserting before
4 said complex text string a preselected control in the presentation data stream, wherein
5 the preselected control corresponds to a plurality of parameters for controlling

6 processing of complex text, each parameter represented by a corresponding value in
7 the preselected control, a first parameter having a value indicating a control type for
8 controlling processing of complex text, a second parameter taking one or more values
9 for enabling and disabling the processing of complex text.

1 15. The computer program product of claim 14 wherein the one or more
2 values for enabling and disabling the processing of complex text comprise a set of
3 values for enabling and disabling a first type of processing of complex text.

1 16. The computer program product of claim 15 wherein the first type of
2 processing of complex text comprises bidirectional (*bidi*) processing.

1 17. The computer program product of claim 15 wherein the plurality of
2 parameters further includes a third parameter, wherein the third parameter takes one
3 or more values for enabling and disabling a second type of processing of complex
4 text.

1 18. The computer program product of claim 17 wherein the second type of
2 processing of complex text comprises glyph processing.

1 19. The computer program product of claim 14 wherein the plurality of
2 parameters further includes a third parameter, the third parameter taking a value
3 comprising an alternate text position.

1 20. A machine readable computer program product including
2 programming for processing complex text comprising programming instructions for:

3 responsive to a first predetermined type of control in a presentation data
4 stream, wherein the first predetermined type of control includes a first parameter
5 represented by a corresponding value in the first predetermined type of control for
6 controlling a first type of complex text processing:

7 determining if a first type of complex text processing is enabled;

8 applying the first type of complex text processing to a complex text
9 string succeeding said first predetermined type of control in the presentation data
10 stream, if the first type of complex text processing is enabled.

1 21. The computer program product of claim 20 wherein the first type of
2 complex text processing comprises bidirectional (*bidi*) processing.

1 22. The computer program product of claim 21 wherein the first parameter
2 takes one or more values for enabling and disabling the processing of complex text,
3 and wherein the one or more values for enabling and disabling the processing of
4 complex text includes one or more values for determining a paragraph direction for
5 the bidirectional processing of the complex text.

1 23. The computer program product of claim 20 wherein the first
2 predetermined type of control includes a second parameter represented by a
3 corresponding value in the predetermined type of control for controlling a second
4 type of complex text processing, the method further comprising:

5 determining if a second type of complex text processing is enabled;

6 applying the second type of complex text processing to the complex
7 text string succeeding said first predetermined type of control in the presentation data
8 stream, if the second type of complex text processing is enabled.

1 24. The computer program product of claim 23 wherein the second type of
2 complex text processing comprises glyph processing.

1 25. The computer program product of claim 20 further comprising
2 programming instructions for:

3 responsive to a second predetermined type of control in the presentation data
4 stream, the second predetermined type of control including a parameter represented
5 by a corresponding value in the second predetermined type of control operable for
6 disabling the first type of complex text processing:

7 determining if the first type of complex text processing is disabled; and

8 if the first type of complex text processing is disabled, overriding said step of
9 applying the first type of complex text processing to the complex text string.

1 26. The computer program product of claim 20 wherein the first
2 predetermined type of control includes a second parameter represented by a
3 corresponding value in the first predetermined type of control for determining an
4 alternate text position, the programming instructions including instructions for setting
5 a text position using said alternate text position if the first type of complex text
6 processing is enabled.

1 27. A data processing system for identifying complex text comprising:
2 circuitry operable for, if a presentation data stream contains a complex text
3 string, inserting before said complex text string a preselected control in the
4 presentation data stream, wherein the preselected control corresponds to a plurality of
5 parameters for controlling processing of complex text, each parameter represented by
6 a corresponding value in the preselected control, a first parameter having a value
7 indicating a control type for controlling processing of complex text, a second
8 parameter taking one or more values for enabling and disabling the processing of
9 complex text.

1 28. The data processing system of claim 27 wherein the one or more
2 values for enabling and disabling the processing of complex text comprise a set of
3 values for enabling and disabling a first type of processing of complex text.

1 29. The data processing system of claim 28 wherein the first type of
2 processing of complex text comprises bidirectional (*bidi*) processing.

1 30. The data processing system of claim 28 wherein the plurality of
2 parameters further includes a third parameter, wherein the third parameter takes one
3 or more values for enabling and disabling a second type of processing of complex
4 text.

1 31. The data processing system of claim 30 wherein the second type of
2 processing of complex text comprises glyph processing.

1 32. The data processing system of claim 27 wherein the plurality of
2 parameters further includes a third parameter, the third parameter taking a value
3 comprising an alternate text position.

1 33. A data processing system for processing complex text comprising:
2 circuitry operable for, responsive to a first predetermined type of
3 control in a presentation data stream, wherein the first predetermined type of control
4 includes a first parameter represented by a corresponding value in the first
5 predetermined type of control for controlling a first type of complex text processing:
6 circuitry operable for, determining if a first type of complex text
7 processing is enabled;
8 circuitry operable for applying the first type of complex text
9 processing to a complex text string succeeding said first predetermined type of
10 control in the presentation data stream, if the first type of complex text processing is
11 enabled.

1 34. The data processing system of claim 33 wherein the first type of
2 complex text processing comprises bidirectional (*bidi*) processing.

1 35. The data processing system of claim 34 wherein the first parameter
2 takes one or more values for enabling and disabling the processing of complex text,
3 and wherein the one or more values for enabling and disabling the processing of
4 complex text includes one or more values for determining a paragraph direction for
5 the bidirectional processing of the complex text.

1 36. The data processing system of claim 33 wherein the first
2 predetermined type of control includes a second parameter represented by a
3 corresponding value in the predetermined type of control for controlling a second
4 type of complex text processing, the system further comprising:

5 circuitry operable for determining if a second type of complex text
6 processing is enabled;

7 circuitry operable for applying the second type of complex text
8 processing to the complex text string succeeding said first predetermined type of
9 control in the presentation data stream, if the second type of complex text processing
10 is enabled.

1 37. The data processing system of claim 36 wherein the second type of
2 complex text processing comprises glyph processing.

1 38. The data processing system of claim 33 further comprising:

2 circuitry operable for, responsive to a second predetermined type of control in
3 the presentation data stream, the second predetermined type of control including a
4 parameter represented by a corresponding value in the second predetermined type of
5 control operable for disabling the first type of complex text processing:

6 determining if the first type of complex text processing is disabled;
7 and

8 if the first type of complex text processing is disabled, overriding said
9 step of applying the first type of complex text processing to the complex text string.

1 39. The data processing system of claim 33 wherein the first
2 predetermined type of control includes a second parameter represented by a

3 corresponding value in the first predetermined type of control for determining an
4 alternate text position, the data processing system including circuitry operable for
5 setting a text position using said alternate text position if the first type of complex text
6 processing is enabled.